

CLAIMS

1. Joint compound composition comprising:
  - a) 50 to 60% of calcium sulphate hemihydrate;
  - b) 5 to 15% of an organic binder in powder form; and
  - c) 0.05 to 0.2% of a water repellent.
2. Joint compound composition according to Claim 1, characterized in that it furthermore includes:
  - d) 1 to 10% of a lightening agent.
3. Joint compound composition according to Claim 1, characterized in that it comprises:
  - a) 50 to 60% of calcium sulphate hemihydrate;
  - b) 5 to 10% of an organic binder;
  - c) 0.07 to 0.15% of a water repellent; and
  - d) 3 to 7% of a lightening agent.
4. Joint compound composition according to one of Claims 1 to 3, characterized in that the calcium sulphate hemihydrate is of the alpha type.
5. Joint compound composition according to one of Claims 1 to 4, characterized in that the organic binder is chosen from the group formed by copolymers of vinyl esters and of ethylene monomers, polyacrylics, vinyl acetate/acrylic copolymers, styrene/acrylic and styrene/butadiene copolymers, vinyl acetate/vinyl versatate/acrylic and vinyl acetate/vinyl versatate/vinyl maleate terpolymers, acrylic terpolymers and blends thereof.
6. Joint compound composition according to one of Claims 1 to 5, characterized in that the water repellent is chosen from the group formed by fatty acids, fatty acid salts, waxes and silicone derivatives.
7. Joint compound composition according to one of Claims 1 to 5, characterized in that the water repellent is chosen from oleic acid, stearic acid and their alkali metal or alkaline-earth metal salts.
8. Joint compound composition according to one of Claims 2 to 7, characterized in that the lightening agent is perlite, in particular non-water-repellent expanded perlite.

9. Joint compound composition according to one of Claims 1 to 8, characterized in that it is in the form of a powder.

10. Joint compound composition according to Claim 9, characterized in  
5 that the powder is composed of particles having a diameter of at most 200 microns.

11. Method of producing a structure, in which:  
- building elements are juxtaposed;  
- the joint compound composition according to one of Claims 1 to 10 is  
10 mixed with water so as to obtain a joint compound;  
- the space between the building elements is filled by means of the joint compound obtained above, without using a tape; and  
- the joint compound is left to harden.

15 12. Method according to Claim 11, characterized in that the building elements are plasterboards coated with a paper facing.

13. Joint between two building elements, obtained by implementing the method according to Claim 11 or Claim 12.